

- 12 -

CLAIMS

1. A freewheel bearing device (1) comprising a rolling bearing (2) furnished with a plurality of rolling elements (9) and a cage (10) to retain the rolling elements, and a freewheel (3) furnished with a freewheel spring (14), characterized in that said spring comprises a first portion (17) interacting with the cage (10) and a second portion (15) interacting with an outer and/or inner element, said element being directly or indirectly interlocked with a body on which the rolling elements run.
5
- 15 2. The device as claimed in claim 1, characterized in that said spring comprises a portion (17) interlocked in rotation with the cage.
- 20 3. The device as claimed in claim 2, characterized in that said spring comprises coils (14) interacting with a cylindrical bearing surface of said element.
- 25 4. The device as claimed in claim 1, characterized in that said spring comprises a portion (21) interlocked in rotation with said element.
- 30 5. The device as claimed in claim 4, characterized in that said spring comprises coils interacting with a cylindrical bearing surface of the cage (10).
- 35 6. The device as claimed in any one of the preceding claims, characterized in that the freewheel comprises a single spring (14).
7. The device as claimed in any one of claims 1 to 5, characterized in that the freewheel comprises two

springs.

8. The device as claimed in any one of the preceding claims, characterized in that the rolling bearing comprises an outer race (7) and an inner race (8).
5
9. The device as claimed in any one of the preceding claims, characterized in that the cage (10) comprises an axial extension (13) in contact with the first portion of the spring.
10
10. The device as claimed in any one of the preceding claims, characterized in that the spring is helical.
15
11. The device as claimed in any one of the preceding claims, characterized in that the spring has rectangular section.
- 20 12. The device as claimed in any one of the preceding claims, characterized in that said element is made as a single unit with said body.
13. A pulley comprising a device as claimed in any one
25 of the preceding claims and a pulley body (5) interlocked with the outer race (7) of the rolling bearing.